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CENTRAL FAX CENTER**REMARKS - General**

OCT 19 2006

This is responsive to the Examiner's Office Action mailed on August 28, 2006. Applicants have hereby canceled claims 3 and 13; have amended claims 1, 11, and 12; and add new claims 23, 24, 25 and 26. Thus claims 1-2, 4-12, and 14-26 are pending in this application.

The status of all claims and the text of all pending claims are shown above. In the changes made to the claims by the current amendment, ~~deletions are shown by strikethrough~~, and additions are underlined.

Discussion of Claims Rejections - 35 USC §102

The Examiner rejected claims 1, 6, 8-11, 16, 18-20 and 22 as being anticipated by Chan et al. (US Patent No. 6,175,759).

Chan discloses a non-invasive multispectral energy system to detect less than or equal to 5 grams of ICG through 2 cm of tissue (column 5, lines 21-26). The instant invention is to use laser or near infrared (in particularly 600-950 nm) for detecting internal bleeding through a thin layer of tissue about <1 cm. The amended claims 1 and 11 are supported by the following paragraphs in the instant invention:

paragraph [0028] "Human tissues are highly scattering and absorptive media for ultraviolet and visible light. It is difficult for ultraviolet and visible light to penetrate the tissue more than 5 mm, while near infrared can easily reach 10 mm or more. The employment of NIR photons provides the opportunity to probe deeper tissue layers, excite the fluorophore more effectively, produce more fluorescent photons, and transmit more fluorescence signal for detection." and

paragraph [0027] "The fluorescent compound in leaked blood is probed externally with a light beam 7 confined in an optical probe or a light guide 20. The concentration of the fluorescent compound in the blood is in the range of 1 - 500 µg/ml. Thin tissue with no or minimal capillary blood vessel is the preferred area for optical probing. The potential areas for optical probing are vaginal canal, posterior fornix of vaginal wall, cervical region, rectum, frontal fontanel, occipital fontanel, and other relatively thin layer of human tissue. When the light guide is placed against the tissue, the light beam is penetrated through the tissue 37 to reach

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the leaked blood. For example, FIG. 1 shows an optical probe 20 is inserted into a vaginal canal 2 and positioned against a cervical tissue / posterior fornix of vaginal wall 3. Posterior fornix of vaginal wall is relatively thin, on the order of 2 - 4 mm. Therefore, the light beam can easily transmit through the tissue and probe the leaked blood 5 in the body cavity 6, such as the cul-de-sac of abdomen."

Applicants have amended claims 1 and 11 to limit the detectable tissue thickness to <1 cm that is supported by the specification and drawings without introducing any new matter. The Examiner's consideration of the amended claims is respectfully requested.

Discussion of Claims Rejections - 35 USC §103

The Examiner rejected claims 4-5, 7, 14-15 and 17 as being unpatentable solely over Chan et al. (US Patent No. 6,175,759). Further the Examiner rejected claims 2-3, 12-13 and 21 as being unpatentable over Chan et al. in view of Haaland et al. (US Patent No. 5,596,992).

As discussed in the last section, the instant invention is to use laser or near infrared (in particularly 600-950 nm) for detecting internal bleeding through a thin layer of tissue about <1 cm. The amended claims 1 and 11 are supported by at least two paragraphs in the instant invention:

- * paragraph [0028] - near infrared can easily reach 10 mm or more; and
- * paragraph [0027] - Posterior fornix of vaginal wall is relatively thin, on the order of 2 - 4 mm.

Claims 2 and 4-10 are dependent claims of the amended independent claim 1, whereas claims 12 and 14-22 are dependent claims of the amended independent claim 11. Applicants request re-consideration of claims rejection.

Discussion of New Claims

Applicants have added new claims 23 and 24, 25 and 26 (*paragraph [0027] - the leaked blood 5 in the body cavity 6, such as the cul-de-sac of abdomen) to vary the scope of protection and to protect other features of embodiments of the invention. The new claims are supported by the specification and drawings and no new matter has been introduced. The Examiner's consideration of the new claims is respectfully requested.

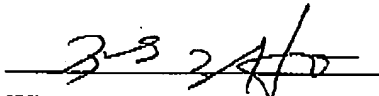
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New claims 23-26 are added as dependent claims directly or indirectly depending to the amended independent claim 1 or 11, which applicants submit for consideration.

Conclusion and Conditional Request For Constructive Assistance

For all of the above reasons, applicants submit that claims are now in proper form, and that the claims all define patentably over the prior art. Therefore they submit that this application is now in condition for allowance, which action they respectfully solicit. If, for any reason, this application is not believed to be in full condition for allowance, applicants respectfully request the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 706.03(d) and § 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings. If further issues remain to be resolved, the Examiner is cordially invited to contact the undersigned (562-801-2088) such that any remaining issues may be promptly resolved.

Respectfully submitted,


Winston Z. Ho applicant

10-19-2006
Date